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(54) Title: PROCESS FOR PREPARATION OF BIODEGRADABLE POLYMERS AND RESINS FROM PROTEINS, AND PLASTICS OBTAINED THEREBY

(57) Abstract: A method for preparing polyester/polyamide polymers, resins and plastics from proteins is disclosed. Using nitrous acid or nitrous oxide, a protein is converted to a hydroxyl carboxyl polyamide protomer. Protomers are condensed through hydroxyl and carboxyl groups to make inter-protomer ester bonds, resulting in a polyester polyamide polymer, resin or plastic.

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# INTERNATIONAL SEARCH REPORT

International application No.

PCT/IL03/01010

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : C08H 5/04; C08H 1/00; C08L 89/00

US CL : 527/200, 207, 600, 604; 524/783, 784, 780; 525/54.1, 54.45, 437, 444, 450, 509, 535, 540; 530/203,

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 527/200, 207, 600, 604; 524/783, 784, 780; 525/54.1, 54.45, 437, 444, 450, 509, 535, 540; 530/203,

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
EAST

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5,397,834 A (JANE et al) 14 MARCH 1995 (14.03.1995), columns 1-14	1-113
A	US 5,523,293 A (JANE et al) 04 JUNE 1996 (04.06.1996), columns 1-19	1-113
A	US 5,710,190 A (JANE et al) 20 JANUARY 1998 (20.01.1998), columns 1-16	1-113

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

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"&" document member of the same patent family

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